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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,466	09/27/2001	Tsutomu Tamaki	030675-063	9568

7590 06/17/2003  
BURNS, DOANE, SWECKER & MATHIS, L.L.P.  
P.O. Box 1404  
Alexandria, VA 22313-1404

EXAMINER

LEE, BENNY T

ART UNIT PAPER NUMBER

2817

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER	
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DATE MAILED:

9

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

- ☒ This application has been examined ☒ Responsive to communication filed on 27 March 2003 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449       | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474      | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-17 are pending in the application.  
Of the above, claims 3-14 are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1, 2, 15-17 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☒ Claims 1-17 are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are: ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☒ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☒ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

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Applicant's election of Species I, claims 1, 2, 15-17 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 3-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8.

The disclosure is objected to because of the following informalities: At the following occurrences throughout the specification, "the" (prior to "figures") should be rewritten as --these--: page 7, line 19; page 14, line 25; page 18, line 26; page 22, line 9; page 24, line 2; page 26, line 7; page 27, line 28; page 32, line 3; page 33, line 19; page 35, lines 5, 8; page 36, lines 5, 8. Page 9, line 20, note that --as shown in Fig. 4-- should follow "2b" for clarity. Page 10, line 10, note that --in Fig. 4-- should follow "above" for clarity. Page 15, line 28, note that the "," should be deleted as being unnecessary. Page 22, line 14, note that --(see Fig. 11B)-- should follow "12" for clarity. Page 22, line 26; page 25, line 4; page 31, line 18; page 32, line 34: note that --(not shown herein)-- should follow each occurrence of "L2". Note that explicit detail descriptions of Figs. 8B, 19A and 19C should be respectively provided. Also, with respect to the fig. 22 description, reference labels (2a, 2b, 8a, 15) need to be explicitly described therewith.

Appropriate correction is required.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Park.

Park (Fig. 8) disclose top and bottom substrates (194, 196), each of which comprises a cavity or "cutout" opening therein characterized as a "waveguide terminal" (especially when the opening is arranged in conjunction with microstrips (188, 190) to define a waveguiding structure). Note that interior walls of each substrate (194, 196) are plated (by a conductive material) as described at col. 4, line 50, and thereby characterizes a "contact region" in each substrate. As further described at col. 4, line 50, the various layers (i.e. substrates (194, 196) and interconnect or "joint" member (180) are "bonded" or joined together to form a unitary connected structure. Note that from the resulting structure, plated through (ground) holes (92) substantially surround the contour of the respective openings (see col. 4, lines 45-97) to form "contact regions" along with interior plating. Furthermore, note that a respective sets of through holes (192) are associated with the corresponding waveguiding line (188, 190) and opening to provide plural regions of contact.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

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art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park.

Park discloses the claimed invention, as discussed above, but does not specify the manner in which the substrates (194, 196) are "bonded" with/by the interconnecting joint member (180).

Accordingly, since Park is silent as to the type of bonding used to form the resultant structure, this suggests that any equivalent type of bonding (e.g. soldering, adhesive, thermal compression, etc) would have been usable therewith.

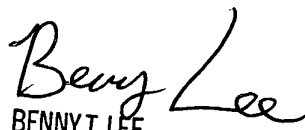
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sturdivant et al and Hoffmeister et al pertain to coupling structures.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 308-4902.

Lee/ek

06/06/03

  
BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817